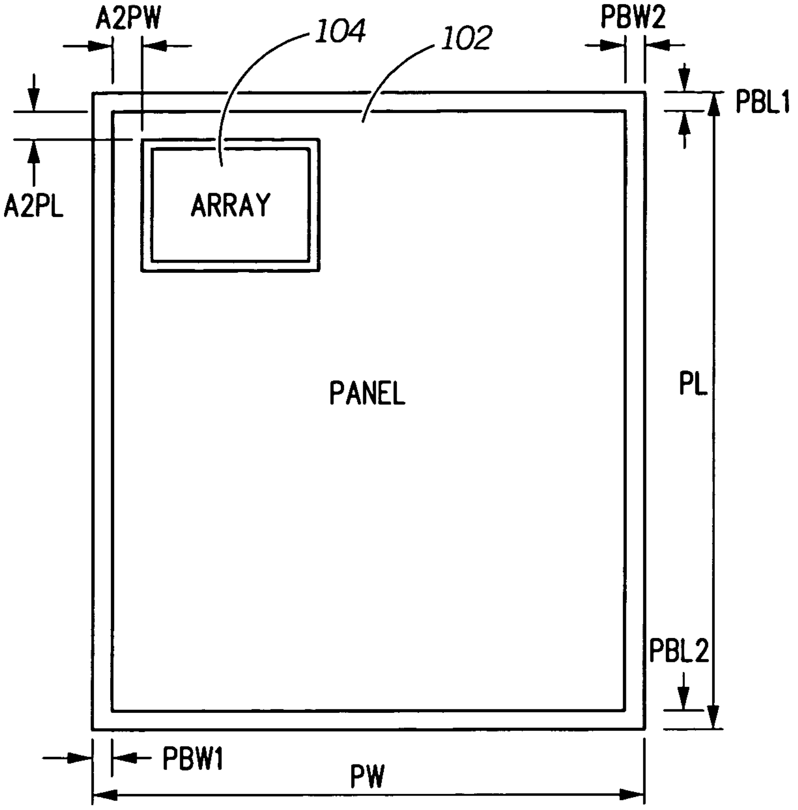


FIG. 1

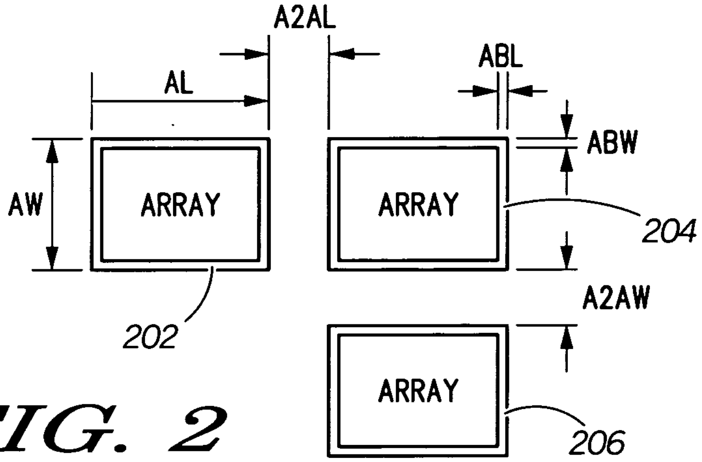


FIG. 2

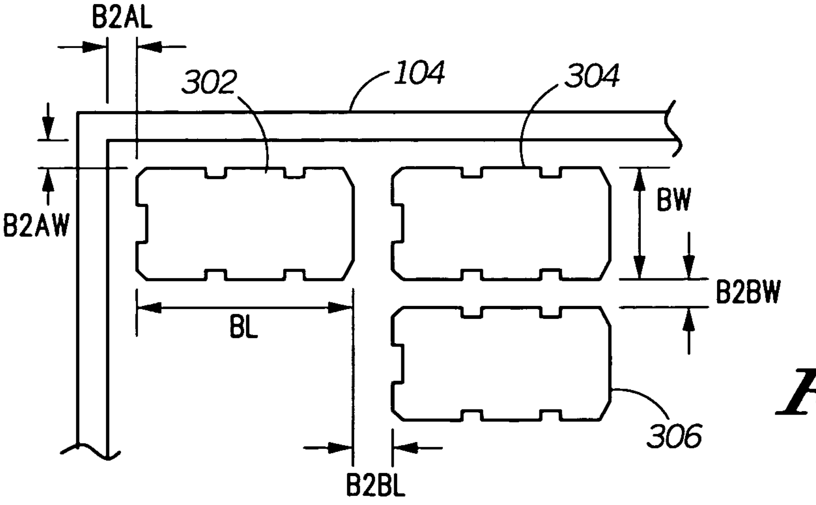


FIG. 3

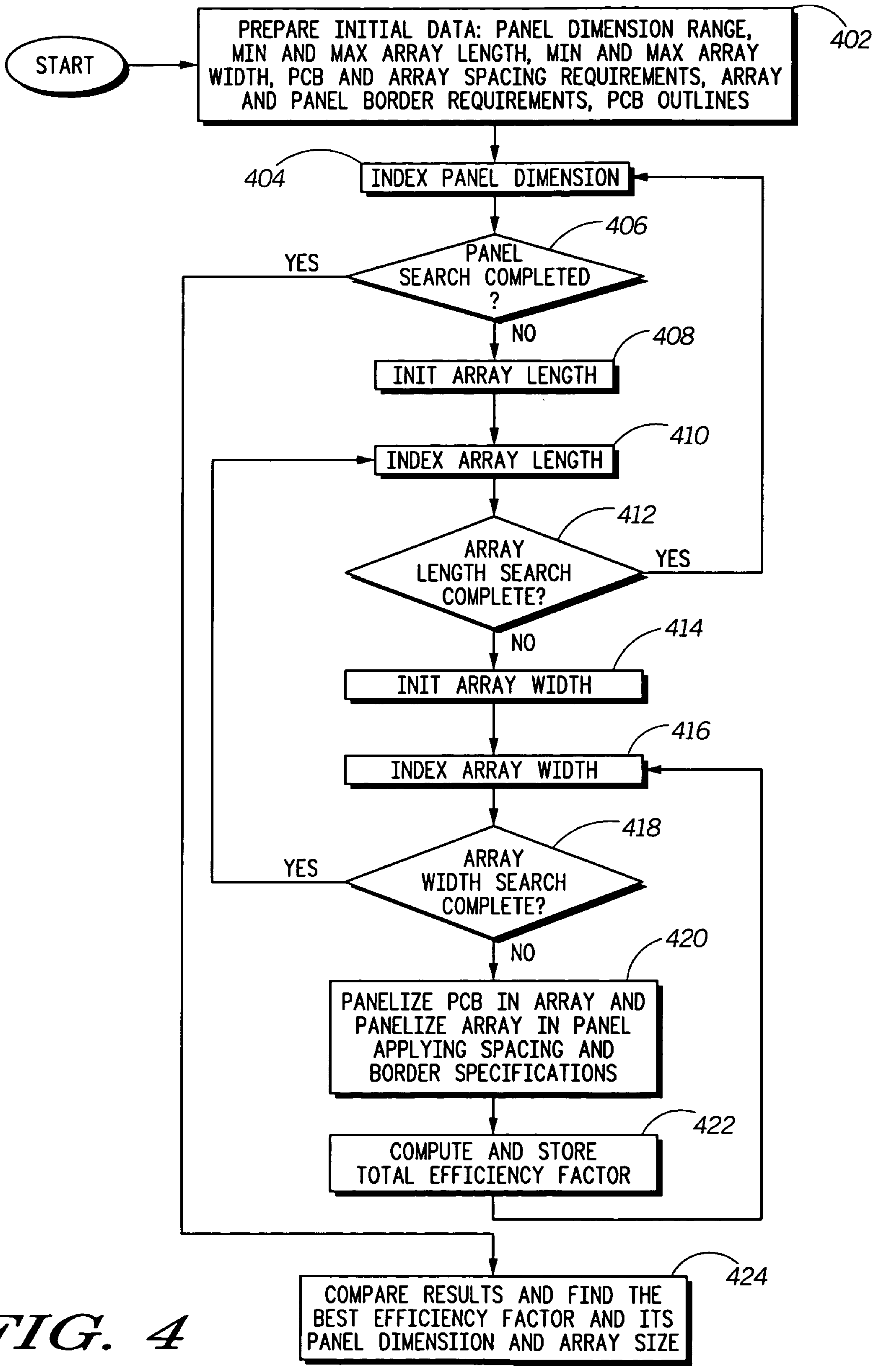
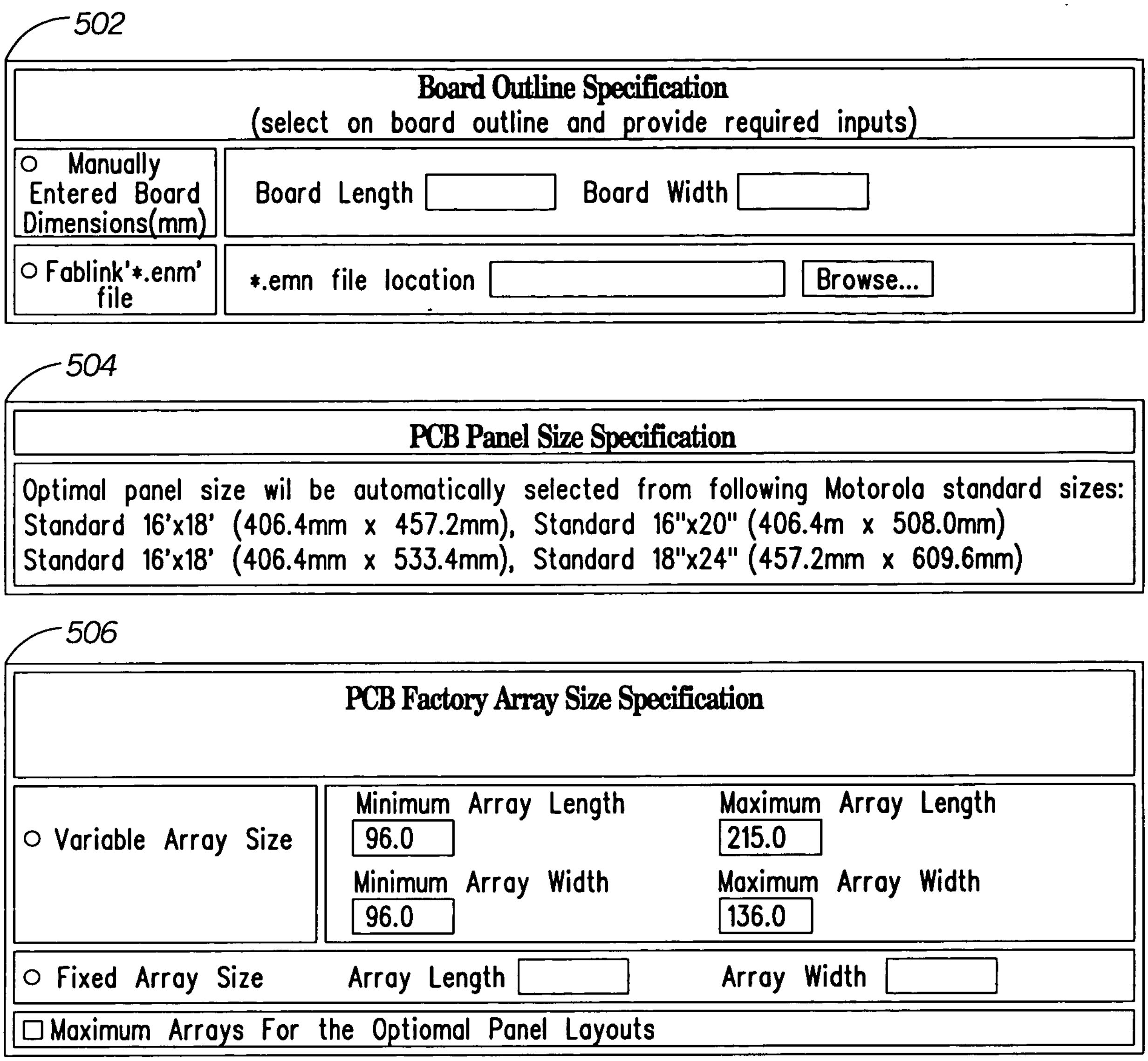

START
PREPARE INITIAL DATA: PANEL DIMENSION RANGE, MIN AND MAX ARRAY LENGTH, MIN AND MAX ARRAY WIDTH, PCB AND ARRAY SPACING REQUIREMENTS, ARRAY AND PANEL BORDER REQUIREMENTS, PCB OUTLINES
402
404
INDEX PANEL DIMENSION
406
PANEL SEARCH COMPLETED ?
YES
NO
408
INIT ARRAY LENGTH
410
INDEX ARRAY LENGTH
412
ARRAY LENGTH SEARCH COMPLETE?
YES
NO
414
INIT ARRAY WIDTH
416
INDEX ARRAY WIDTH
418
ARRAY WIDTH SEARCH COMPLETE?
YES
NO
420
PANELIZE PCB IN ARRAY AND PANELIZE ARRAY IN PANEL APPLYING SPACING AND BORDER SPECIFICATIONS
422
COMPUTE AND STORE TOTAL EFFICIENCY FACTOR
424
COMPARE RESULTS AND FIND THE BEST EFFICIENCY FACTOR AND ITS PANEL DIMENSIION AND ARRAY SIZE

FIG. 4



Board Outline Specification

(select on board outline and provide required inputs)

○ Manually Entered Board Dimensions(mm)

Board Length ☐ Board Width ☐

○ Fablink'*.enm' file

*.emn file location ☐ Browse...

PCB Panel Size Specification

Optimal panel size wil be automatically selected from following Motorola standard sizes:
Standard 16'x18' (406.4mm x 457.2mm), Standard 16"x20" (406.4m x 508.0mm)
Standard 16'x18' (406.4mm x 533.4mm), Standard 18"x24" (457.2mm x 609.6mm)

PCB Factory Array Size Specification

○ Variable Array Size

Minimum Array Length 96.0

Maximum Array Length 215.0

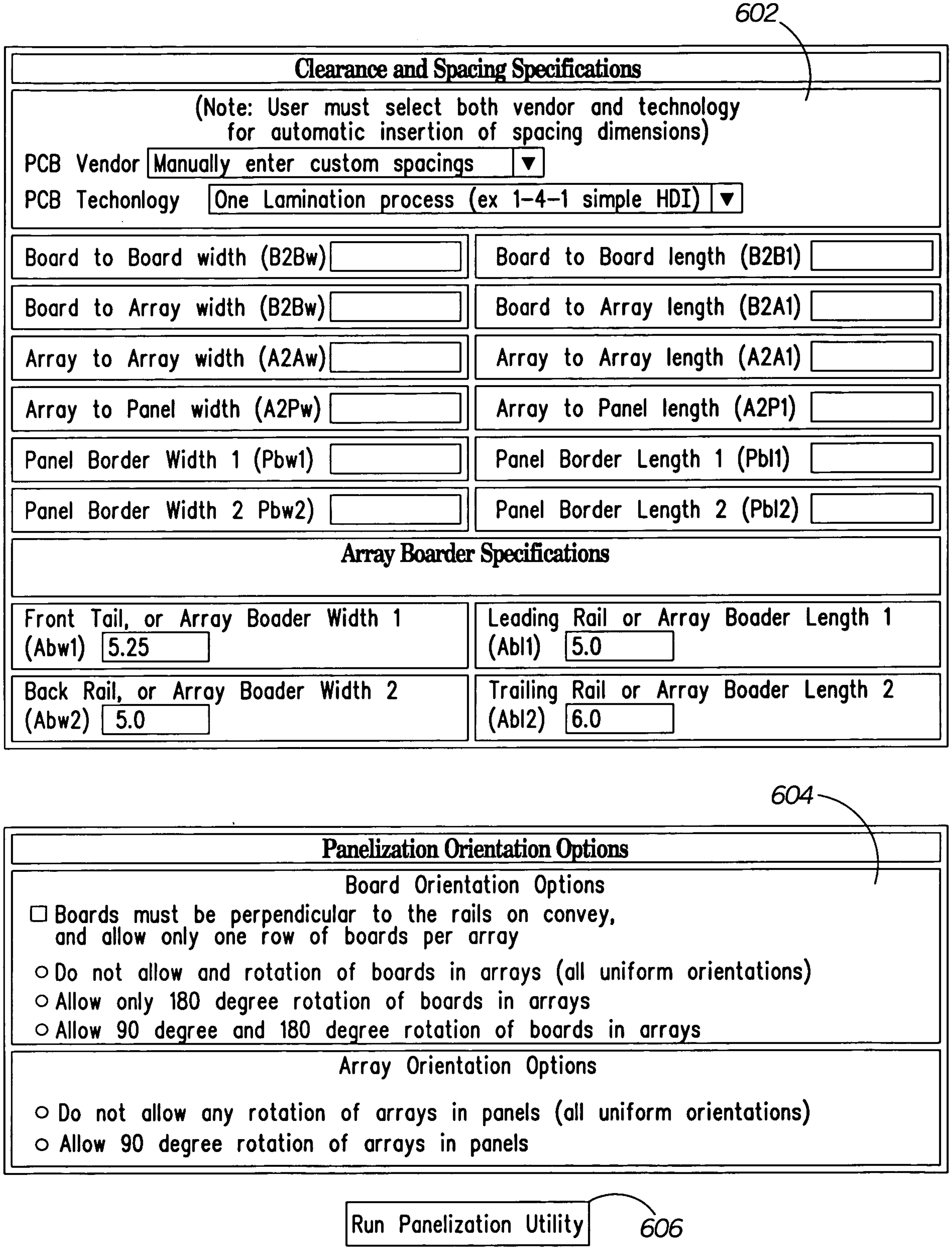
Minimum Array Width 96.0

Maximum Array Width 136.0

○ Fixed Array Size Array Length ☐ Array Width ☐

☐ Maximum Arrays For the Optiomal Panel Layouts

FIG. 5



Clearance and Spacing Specifications

(Note: User must select both vendor and technology for automatic insertion of spacing dimensions)

PCB Vendor: Manually enter custom spacings ▼
PCB Techonlogy: One Lamination process (ex 1-4-1 simple HDI) ▼

Board to Board width (B2Bw)
Board to Board length (B2B1)
Board to Array width (B2Bw)
Board to Array length (B2A1)
Array to Array width (A2Aw)
Array to Array length (A2A1)
Array to Panel width (A2Pw)
Array to Panel length (A2P1)
Panel Border Width 1 (Pbw1)
Panel Border Length 1 (Pbl1)
Panel Border Width 2 Pbw2)
Panel Border Length 2 (Pbl2)

Array Boarder Specifications

Front Tail, or Array Boader Width 1 (Abw1): 5.25
Leading Rail or Array Boader Length 1 (Abl1): 5.0
Back Rail, or Array Boader Width 2 (Abw2): 5.0
Trailing Rail or Array Boader Length 2 (Abl2): 6.0

Panelization Orientation Options

Board Orientation Options

☐ Boards must be perpendicular to the rails on convey, and allow only one row of boards per array

○ Do not allow and rotation of boards in arrays (all uniform orientations)
○ Allow only 180 degree rotation of boards in arrays
○ Allow 90 degree and 180 degree rotation of boards in arrays

Array Orientation Options

○ Do not allow any rotation of arrays in panels (all uniform orientations)
○ Allow 90 degree rotation of arrays in panels

Run Panelization Utility

FIG. 6

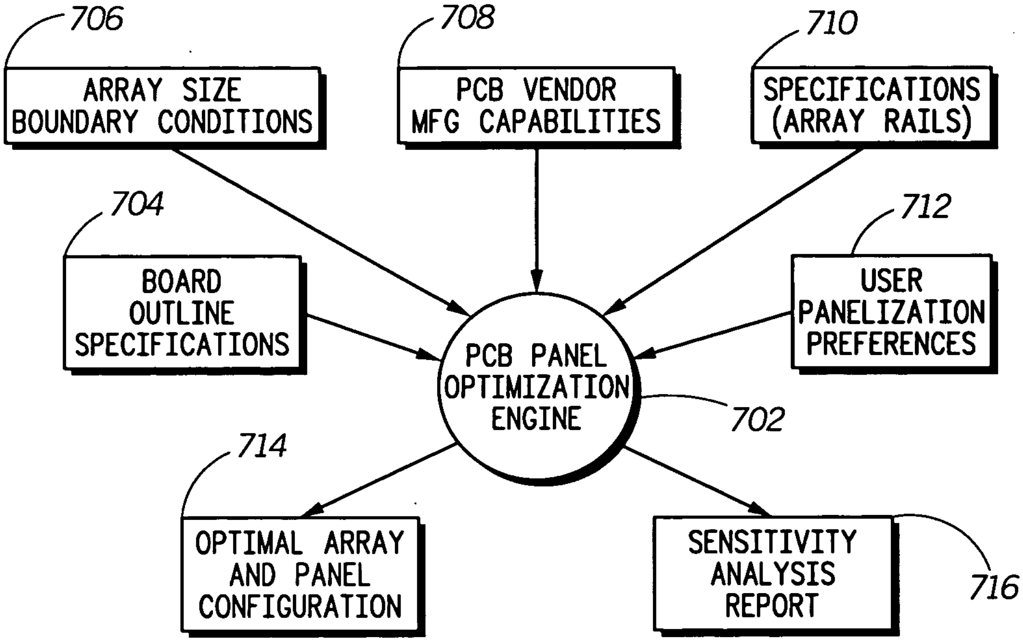

706
ARRAY SIZE
BOUNDARY CONDITIONS
708
PCB VENDOR
MFG CAPABILITIES
710
SPECIFICATIONS
(ARRAY RAILS)
704
BOARD
OUTLINE
SPECIFICATIONS
712
USER
PANELIZATION
PREFERENCES
PCB PANEL
OPTIMIZATION
ENGINE
702
714
OPTIMAL ARRAY
AND PANEL
CONFIGURATION
SENSITIVITY
ANALYSIS
REPORT
716

FIG. 7

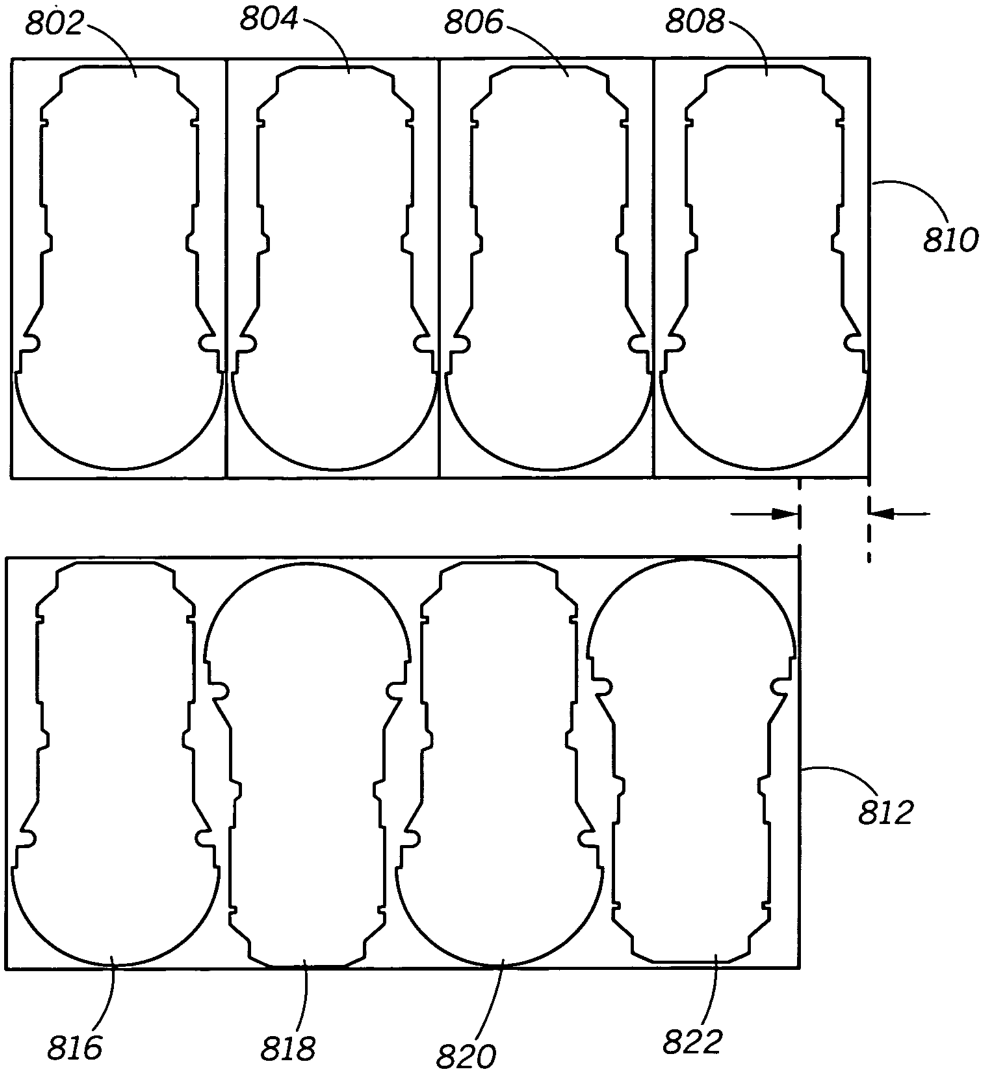


FIG. 8